




A Touchstone Energy® Cooperative 

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DATE: March 6, 2014

FROM: Michael Keyser
CEO & General Manager

TO: The Honorable Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
Wireline Competition Bureau

RE: Expression of Interest of BARC Electric Cooperative
WC Docket No. 10-90/Connect America Fund (CAF)

Background on BARC Electric Cooperative

BARC is a *customer-owned* electric utility serving a population of over 30,000 across five Virginia counties. BARC owns and operates 2,000 miles of electric transmission and distribution line along its rights-of-way. BARC's service territory is, in part, rugged and mountainous. It is also vast, encompassing almost 1,500 square miles, from the top of the Blue Ridge Mountains, into the Shenandoah Valley, and all the way to the West Virginia border. We are just three hours from downtown Washington, D.C.

As mentioned in our prior docket filing, BARC's service territory is among the most un- and under-served areas in all of Virginia. According to the Virginia Information Technologies Agency (VITA), approximately 67% of census blocks do not have access to broadband internet. Of those few that do have broadband access, DSL is their sole option.

Each month, we survey a sampling of our customer-owners on their satisfaction, and our scores average over 90%. Not surprisingly, the single greatest request of our customers is for BARC to provide broadband internet service.

Our Project

In response to customer demand, in 2013, we hired Byers Engineering (Atlanta, GA) to design and engineer a fiber-to-the-premises (FTTx) project that leverages our existing rights-of-ways and electric infrastructure. Backed by a redundant 275-mile core fiber ring to each of our substations, this project will connect over 10,000 anchor, commercial, industrial and residential structures with fiber. Where available, we intend to leverage the existing open-access fiber of the Rockbridge Area Network Authority (RANA), a BTOP grant recipient. Because our core ring

connects each of our substations, we will be able to utilize it for several smart grid applications, including secure IP meter reading and demand response.

Our FTTx network is scalable and capable of providing gigabit service to every home or business. We plan to offer bundled and unbundled plans. Below is a table of our initial *bundled* internet and telephone plans (also available unbundled):

Residential High-Speed Internet Service + Voice (unlimited local & long distance)

| | |
|-----------|--|
| Starter: | Up to 20 Mbps download and 10 Mbps upload \$79.95/month |
| Basic: | Up to 30 Mbps download and 10 Mbps upload \$89.95/month |
| Advanced: | Up to 110 Mbps download and 20 Mbps upload \$129.95/month |
| 1-Gig: | Up to 1 Gbps download and 50 Mbps upload \$189.95/month |

Business High-Speed Internet Service + Voice (unlimited local & long distance)

| | |
|-----------|--|
| Silver: | Up to 20 Mbps download and 20 Mbps upload \$129.95/month |
| Gold: | Up to 50 Mbps download and 40 Mbps upload \$179.95/month |
| Platinum: | Up to 250 Mbps download and 40 Mbps upload \$249.95/month |
| 1-Gig: | Up to 1 Gbps download and 50 Mbps upload \$349.95/month |

Nearly our entire electric service footprint qualifies as an eligible high-cost area. Based on the data provided by the FCC, our service area encompasses 7 eligible census tracts out of a total of 10 census tracts that we serve in total. Our customer-owners are *by definition* who Connect America Fund dollars are meant to benefit. For a summary of anchor institutions, community support facilities, and other customers to be served, please see the attached [Customer Profile](#).

ROCKBRIDGE COUNTY, VA – 4 eligible census tracts (entire county)
51-163-9301; 9302; 9303; 9304

BATH COUNTY, VA – 1 eligible census tract (entire county)
51-017-9201

AUGUSTA COUNTY, VA – 1 eligible census tract
51-015-0701

ALLEGHANY COUNTY, VA – 1 eligible census tract
51-005-0803-01

Our FTTx deployment includes all of Bath and Rockbridge counties, as well as parts of Alleghany, Augusta, and Highland counties. As a local community organization, we have developed strong relationships with our local, state and federal government leaders, who are very supportive of our project (*see attached [Letter of Support](#)*).

Project At-A-Glance

Assuming a conservative take rate of 30%, we need \$15,000,000 (\$1,207 per passing) to fully fund this project. This amount is *less* than 10 years of the annual subsidies suggested by the Connect America Cost Model (CACM). This is due to the fact that we have the existing infrastructure, ownership of the ROWs and poles, existing billing relationships, and not-for-profit mission. In short, because we are an electric cooperative, we can execute delivery of broadband more efficiently and effectively with less supplementary funding than others might need. We view our need for supplemental project funds as a one-time capital expenditure subsidy. Our financial model does not factor in any ongoing subsidies from the FCC.

We chose FTTx for its scalability and potential impact on the future economic development of the community we serve.

We intend to finance our core substation ring through an electric work plan loan in the amount of \$16,607,770 from the USDA Rural Utilities Service (USDA-RUS). We would like to fund the remainder of the capital expense through a combination of Connect America Fund dollars and other RUS or private financing.

| | |
|----------------------------|---|
| Services provided: | Fiber-to-the-premises, voice (IPTV – TBD) |
| Pop. served: | 30,000+ |
| Line miles: | 2,000 |
| Total cost: | \$72,090,822 |
| BARC investment: | \$16,607,770 |
| FCC investment: | \$15,000,000 |
| Additional BARC financing: | \$40,483,052 |

Attachments:

Customer Profile
Letter of Support (Representative Bob Goodlatte)

For More Information:

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BARC ELECTRIC COOPERATIVE

CUSTOMER PROFILE

| | Members | Meters | Comments |
|--------------------|---------|--------|----------|
| Residential | 9,404 | 11,809 | |

Commercial Rate Classes:

| | | | |
|---|--------------|---------------|----------------------------------|
| Educational - Elementary | 2 | 3 | Rockbridge, Millboro, and Valley |
| Educational - Middle | 1 | 1 | Rockbridge Middle School |
| Educational - High School | 1 | 3 | Bath County High School |
| Educational - University | 1 | 3 | Virginia Military Institute |
| Health Care | 1 | 9 | Bath County Hospital System |
| Federal, State & Local Government | 21 | 129 | See Detail Below |
| Community Support / Recreational Facilities | 30 | 95 | See Detail Below |
| Radio Repeaters | 5 | 5 | |
| Cell Phone Towers | 16 | 85 | |
| Libraries | 1 | 1 | Bath County Library |
| Other Commercial (Businesses) | 192 | 448 | |
| GRAND TOTAL | 9,675 | 12,591 | |

Detail of Federal, State & Local Governments:

| |
|------------------------------|
| AUGUSTA CORRECTIONAL |
| BATH CO BOARD OF SUPERVISORS |
| BATH CO COURT HOUSE |
| BATH CO RECREATION PARK |
| BATH CO SCHOOL BOARD |
| BATH CO SERVICE AUTHORITY |
| BLUE RIDGE PARKWAY |
| CITY OF BUENA VISTA |
| COMMONWEALTH OF VIRGINIA |
| DEPARTMENT OF HIGHWAYS |
| FAA REGIONAL OFFICE |
| LAKE ROBERTSON RECREATION |
| ROCKBRIDGE COUNTY PSA |
| TOWN OF CRAIGSVILLE |
| TOWN OF GOSHEN |
| TOWN OF LEXINGTON |
| U S CORPS OF ENGINEERS |
| UNITED STATES FOREST SERVICE |
| UNITED STATES POST OFFICE |
| USPS BACOVA POST OFFICE |
| VIRGINIA GAME COMMISSION |

Detail of Community Support / Recreational Facilities

| |
|------------------------------|
| BATH HIGHLAND VOL FIRE |
| BLUE RIDGE MOOSE LODGE |
| BOLAR RURITAN CLUB |
| BOLAR VOLUNTEER FIRE D |
| BOY SCOUTS OF AMERICA |
| CAMP ACCOVAC |
| CAMP ALKULANA |
| CAMP APPALACHIA |
| CAMP MONT SHENANDOAH |
| EFFINGER VOL FIRE D |
| FAIRVIEW COMMUNITY CHURCH |
| GRACE BIBLE CAMP |
| HOT SPGS FIRE & RESCUE |
| MCDOWELL VOL FIRE CO I |
| MILLBORO AREA RESCUE S |
| MILLBORO MASONIC LODGE |
| MILLBORO PRESERVATION |
| MILLBORO RURITAN CLUB |
| MILLBORO VOL FIRE ASSO |
| MT GROVE COMMUNITY CHURCH |
| MT GROVE VOL FIRE DEPARTMENT |
| PALMER COMMUNITY CE |
| ROCKBRIDGE AREA COMM S |
| ROCKBRIDGE BATHS VOL FIRE |
| ST LUKES EPISCOPAL CHURCH |
| VFW POST 4204 |
| VIRGINIA ELKS YOUTH CAMP |
| WILLIAMSVILLE CHURCH |
| YOUNG LIFE ROCKBG ALUM |
| YOUTH DEVELOPMENT INC |